

Remarks

Claims 1-20 are pending in this application. Applicants have not amended the claims. Applicants respectfully request favorable reconsideration of this application.

Applicants submit herewith a new declaration signed by the inventors that correctly identifies the counterpart PCT application to this application.

The Examiner objected to the drawing under 37 C.F.R. § 1.84(p)(5) as not including Applicants submit herewith two sheets of corrected drawings including Figs. 1-4. Applicants have amended Fig. 1 to change "10a" to "15" and Fig. 4 to change "9" to "11". Additionally, Applicants have amended Fig. 3 to add a box 16 to represent the communication means to the safety-hardware unit as described in the specification. The safety-hardware unit is identified with reference number 16, which has been added to the specification. Applicants respectfully request approval of the corrected drawings and withdrawal of the objection to the drawings.

The Examiner rejected claims 1-3 and 5-20 under 35 U.S.C. § 102(b) as being anticipated by Schenk.

Schenk does not disclose the invention recited in claim 1 since, among other things, Schenk does not disclose a method that includes attaching a safety-hardware unit to a single controller for increasing a safety integrity level. Rather, Schenk discloses a standard CPU that already is a safety controller. Schenk discloses a system that includes a safety controller that is

one physical unit. On the other hand, the claimed invention includes attaching a safety-hardware unit to a controller. Schenk discloses that safety functionality is obtained in a standard CPU by fault control measures at a hardware level and a safety function level. Therefore, it is clear that the standard CPU includes safety hardware rather than attaching a safety-hardware unit to a controller. Along these lines, as stated in the paragraph numbered 3 on page 1 of Schenk, "*One CPU module should already achieve safety integrity level 3*". In view of the above, not only does Schenk not disclose the claimed invention, but it does not make sense to connect a safety-hardware unit to a controller that already is a safety controller.

As discussed in the specification, advantages of such a method include increasing a safety level of the control system. The safety-hardware unit makes it possible to utilize a controller used for non-safety related functions by not using the safety-hardware unit. By not utilizing the safety-hardware unit for non-safety related functions, the controller may be less costly and faster than if a full safety level use of the control system. The safety-hardware unit can permit a controller not originally installed for safety related control.

Additionally, by attaching the safety hardware unit to a single controller, the safety hardware unit can monitor the operation of the single controller. The safety hardware unit is coupled to the controller and can, for example, monitor input and output signals to/from the controller to verify proper operation. Any deviation from an expected pattern of signals can be detected by the safety hardware unit. Thus, a higher level of safety is achieved without having to use redundant controllers.

In view of the above, Schenk does not disclose all elements of the invention recited in claims 1-3 and 5-20. Since Schenk does not disclose all elements of the invention recited in claims 1-3 and 5-20, the invention recited in claims 1-3 and 5-20 is not properly rejected under 35 U.S.C. § 102(b). For an anticipation rejection under 35 U.S.C. § 102(b) no difference may exist between the claimed invention and the reference disclosure. *See Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q. 841 (C.A.F.C. 1984).

Along these lines, anticipation requires the disclosure, in a cited reference, of each and every recitation, as set forth in the claims. *See Hodosh v. Block Drug Co.*, 229 U.S.P.Q. 182 (Fed. Cir. 1986); *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985); *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986); and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986).

In view of the above, the reference relied upon in the office action does not disclose patentable features of the claimed invention. Therefore, the reference relied upon in the office action does not anticipate the claimed invention. Accordingly, Applicants submit that the claimed invention is patentable over the cited reference and respectfully request withdrawal of the rejection based on the cited reference.

Accordingly, Applicants respectfully request favorable reconsideration of this case and issuance of the notice of allowance.

If an interview would advance the prosecution of this application, Applicants respectfully

urge the Examiner to contact the undersigned at the telephone number listed below.

The undersigned authorizes the Commissioner to charge insufficient fees and credit overpayment associated with this communication to Deposit Account No. 22-0261.

Respectfully submitted,

Date: September 10, 2009

/Eric J. Franklin/
Eric J. Franklin, Reg. No. 37,134
Attorney for Applicants
Venable LLP
575 Seventh Street, NW
Washington, DC 20004
Telephone: 202-344-4936
Facsimile: 202-344-8300